

Need to Put Money Where Our Moth Is

Excerpts below, for full view article please view http://www.montereyherald.com/search/ci_8821092?IADID

It's been a little more a year since the first light brown apple moth (LBAM) was confirmed in the San Francisco Bay Area. In that time, the California Department of Food and Agriculture (CDFA) has worked to inform the affected communities about the serious nature of this infestation and the importance of eradication. However, considerable misinformation has been disseminated through the Internet and the media. As California's primary state entomologist, it is incumbent on me to address the problems this pest poses to agriculture, communities, and the environment and to clarify solutions that CDFA and the USDA have worked hard to develop... While some may argue over the level of damage and the associated costs that it can cause in a particular situation, it is undeniable that it incurs economic costs to agriculture in Australia and New Zealand.

It is undeniable that noninfested areas of California, many other states, and some trading partners such as Canada and Mexico do not want LBAM. This last point was re-emphasized recently when Canada and Mexico tightened restrictions on imports from infested California counties. The economic consequences of allowing LBAM to become permanently established are dire. If LBAM isn't eradicated from the area it now occupies, that area will be in perpetual quarantine. Nurseries and growers will be forced to live with reduced sales and increased costs of ensuring their products are LBAM-free. These costs may put some producers out of business and force others to relocate. For those that do stay in business within quarantined areas, the costs will not stay with the producers; rather, they will be transferred to the consumer in the form of increased prices...

Beyond the obvious economic threat to crops, businesses, and communities in and near the infested areas, another very real concern is that this insect is adapting so well and so quickly to its adopted home here that it could soon begin to out-compete some of our native species. LBAM could directly threaten some plant species should it adapt to feeding on them, and indirectly threaten some animal species, particularly insects, should it adapt to feeding on plants that are relied upon as food supplies or for critical habitat. Seventeen percent of the rare, threatened, or endangered plants in California are in genera that are recorded as hosts of LBAM, and 41 percent of the threatened or endangered insects in California feed on plants in genera recorded as hosts...additional endangered plants and host plants of endangered species may also prove susceptible.

The public's focus has been on the aerial pheromone treatments...It is important to note, though, that CDFA's overall efforts are much broader and much of the other work is aimed at limiting or reducing the size of the aerial treatment zones. Key activities include setting traps to detect and track the moth population; applying "twist ties" by hand on plants along the edges of the infestation to eradicate "outlier" populations before they can become established; and enforcing quarantines that have largely kept the infestation from spreading beyond where it was originally found in the Bay Area and Central Coast...

Pheromones are the focal point of CDFA's eradication efforts because they are proven effective in reducing populations and are remarkably benign and environmentally friendly. The CDFA has already begun efforts to develop and implement alternative approaches to augment mating disruption...These augmentative approaches include the use of inundative releases of natural enemies and limited use of biorational insecticides to reduce larval populations, moth attraction technique to reduce male moth populations, and sterile insect technique to reduce the number of fertile eggs.

Although these newer technologies are under development, CDFA must move ahead now with eradication efforts using what is currently available in order to prevent this pest from continuing to expand its range. CDFA and USDA fully appreciate the seriousness of the issues. Neither agency undertakes a program of this magnitude lightly, and both have pledged to work with the affected communities to minimize impacts and maximize safety.

These treatments...are necessary to protect California's agriculture and environment from an invasive pest that is already affecting the livelihood of many Californians, that will certainly affect others should it be allowed to spread, and that has the potential to degrade the environment.

Kevin Hoffman received his doctorate in entomology from Clemson University and has served the CDFA since 1994. He wrote this for The Herald.

###